

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0010] with the following rewritten paragraph:

1 [0010] In Figure 2, an ~~and~~ input signal **100** is applied to three amplifiers **102**
2 each having a different gain to produce output signals **104**. The output of the
3 amplifiers is shown graphed over the input range **106** of the A/D converter **108**.
4 Depending on the gain, the amplified signals may exceed the upper or lower limit
5 of the input range **106** of the A/D converter. Each of the amplified output signals
6 **104** is applied to the input of the A/D converter **108**. The A/D converter
7 produces a group of data points **110** for each of the amplifier output signals.
8 Each group of data points is analyzed in a comparison element 112, for example
9 in a suitably programmed digital microprocessor or microcontroller circuit. The
10 group of data points that has the highest gain amplifier and no saturation points
11 is used for determining the current used in the system.

IN THE TITLE:

Please replace the Title, with the following substitute Title:

ELECTRICITY METER WITH MULTIPLE GAIN SIGNALS TO AN A/D
CONVERTER